Roles of kinins in the nervous system.

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Public Summary:

Scientific Abstract:
The kallikrein-kinin system (KKS) is an endogenous pathway involved in many biological processes. Although primarily related to blood pressure control and inflammation, its activation goes beyond these effects. Neurogenesis and neuroprotection might be stimulated by bradykinin being of great interest for clinical applications following brain injury. This peptide is also an important player in spinal cord injury pathophysiology and recovery, in which bradykinin receptor blockers represent substantial therapeutic potential. Here, we highlight the participation of kinin receptors and especially bradykinin in mediating ischemia pathophysiology in the central and peripheral nervous systems. Moreover, we explore the recent advances on mechanistic and therapeutic targets for biological, pathological, and neural repair processes involving kinins.

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